

ABSTRACT

The present invention relates to a polishing apparatus, and a semiconductor manufacturing method using the apparatus. Dressing of a grindstone surface is ground by sizing processing whereby dressing of a tool surface can be done while preventing occurrence of cracks on the grindstone surface which is the cause for occurrence of scratches. Further, flatness of the surface of a dressing tool can be guaranteed because of sizing cutting-in; even if a thick grindstone of a few centimeters is used, the flatness can be maintained to the end; and processing with less in-face unevenness can be always carried out. Therefore, the life of the dressing tool can be greatly extended.

Further, the present sizing-dressing is carried out jointly with processing of a wafer to thereby enable improvement of throughput of the apparatus as well as maintenance of a processing rate.

The present apparatus and method are effective for planarization of various substrate surfaces having irregularities.